

Some new plants from Eastern Asia.—By D. PRAIN.

[Received 3rd September. Read 4th November, 1903.]

While recently engaged in laying into the Calcutta Herbarium a number of Eastern Asiatic specimens, the writer has found it necessary to prepare descriptions for the following ten plants which are species that were either previously undescribed or imperfectly characterised. These descriptions he now offers to the Asiatic Society.

CONVOLVULACEÆ.

ERYCIBE Roxb.

1. *ERYCIBE ALBIFLORA* Hallier f. Bull. Herb. Boiss. v. 1052. A large climber over 50 feet long; branches angled, puberulous; branchlets angled, closely rusty-puberulous; leaves elliptic, base wide-cuneate, apex abruptly shortly acuminate with an obtuse tip; 3-7 in. long, 1.25—3 in. wide; chartaceous, glabrous on both surfaces, dark-green above, paler beneath; lateral nerves 7-8 pairs, very oblique, ascending, distinct on both surfaces, raised beneath; secondary reticulate venation very distinct on both surfaces, but especially beneath; petiole .4-.6 in. long, adpressed rusty-pubescent. *Flowers* in narrow but lax terminal panicles of 5-9-flowered cymes; panicles 8-12 in. long, 1.5 in. wide; the rachis and peduncles of cymes .1-.25 in. long, adpressed rusty-pubescent; pedicels .15 in. long and lanceolate bracteoles rusty-pubescent. *Sepals* orbicular, rusty-pubescent externally. *Corolla* white, .5 in. across; lobes spreading, glabrous internally; interlobular spaces externally densely rusty-pubescent; lobes semicircular, margins undulate. *Fruit* ellipsoid, black, .7 in. long .4 in. wide. *E. subspicata* Prain Journ. As. Soc. Beng. lxiii. 2, 84 (as to the Bootan and Assam plant only); C. B. Clarke in Hook. f. Flor. Brit. Ind. iv. 181, partly (as to the Silhet plant only); Hallier f. Bull. Herb. Boiss. v. 737. *E. paniculata* Wall. Cat. 1330/1, not of Roxb.

SIKKIM: 4-6,000 ft., *Hooker!* Ryang at 1,500 ft., *King!* Rungjo, 1,400 ft., *King!* BOOTAN: at 2000 ft., *King!* ASSAM: Gauhati, *Griffith!* Golaghat, *Mann!* KHASIA: *Mann!* Nya bungalow, 2,500 ft., *Clarke!* SILHET: *Gomez;* *DaSilva* (Wall. Cat. 1330).

This very distinct species was compared by Wallich with the quite different *E. paniculata* Roxb., and was subsequently issued, from Sikkim, under the same name in the *Herb. Ind. Or.* of Hooker and Thomson; it forms therefore some part

of the *E. paniculata* of the Flora of British India. Recognising its very marked differences it was separated by the writer in 1894 and included by him (*Journ. As. Soc. Beng.* lxiii. 2, 84) in *E. subspicata* Wall., a species of which there is no Wallichian specimen at Calcutta. At the same time the writer placed what now proves to be the true *E. subspicata* from Assam and Khasia with *E. Princei* Wall., to which species *E. subspicata* is very closely allied. Dr. Hallier, the greatest living authority on the difficult family *Convolvulaceæ*, when working at Calcutta accepted the writer's identification of this species with *E. subspicata*, but (Bull. Herb. Boiss. v. 737) threw a doubt on the accuracy of the identification of the specimens from Assam and Khasia mentioned above, that had been referred to *E. Princei*. Working subsequently in Europe Dr. Hallier made the discovery that these latter specimens are examples of the true *E. subspicata* of Wallich; this being the case, it was necessary to provide a new name for the plant which constitutes *E. subspicata* of the *Journ. As. Soc. Beng.* lxiii. 2, 84.

It may be mentioned here that among the plants collected by Dr. Henry in the Szemao Mountains of S.-W. Yunnan there are four gatherings of what appears to the writer to be *E. subspicata* Wall., the previously recorded localities for which are Assam, Khasia and the Taong Dong Mountains in Burma. These numbers are Henry 10825, 12514, 12739, 13430.

It may also be mentioned that the same collection contains, in Henry 11863, a gathering of *E. laevigata* Wall., previously known only from Sikkim, Khasia and Jaintea.

2. *ERYCIBE HENRYI* Prain. A shrub with spreading shoots, or a climber; branches angled, bark fissured, glabrous; branchlets angled, glabrous or very sparingly and finely puberulous; leaves elliptic, base wide-cuneate, apex rather gradually narrowed to a subacuminate apex with obtuse tip; 3 in. long, 2 in. wide; chartaceous, glabrous on both surfaces, dark-green above, paler beneath; lateral nerves 6-7 pairs, straight not very oblique, visible above, slightly raised beneath; secondary reticulate venation very distinct beneath, obscure above petiole 6 in. long, glabrous. *Flowers* in terminal panicles passing into the axils of the uppermost leaves; axillary racemes and individual branches of panicle 1-1.5 in. long; peduncles .25-.5 in. long, sparsely puberulous as are the main-rachis, the pedicels .1 in. long, and the ovate-lanceolate deciduous minute bracts and bracteoles. *Sepals* orbicular, sparingly puberulous externally. *Corolla* white; lobes spreading, rather short, glabrous internally; interlobular spaces externally densely pubescent; lobules nearly semi-circular, margins entire. *Erycibe* n. 3 Hallier f. Bull. Herb. Boiss. v. 737.

CHINA: Formosa; Takow, Ape's Hill, Henry 1884!

3. *ERYCIBE FORBESII* Prain. A small tree with long spreading branches; branches cylindrical, faintly puberulous or glabrous; branchlets cylindrical, adpressed rusty-pubescent; leaves ovate-lanceolate to lanceolate, narrowed to the cuneate base and to the acuminate apex with obtuse tip; 4-6 in. long, 1.25-2 in. wide; chartaceous, glabrous on both

surfaces, rather dark-green above, paler beneath; lateral nerves 4-5 pairs, very obliquely ascending, visible below but not at all conspicuous, not visible above; secondary venation not visible. *Flowers* in terminal and axillary panicles of 5-7-flowered cymes; terminal panicles 6-8 in. long, axillary 4 in. long; main-rachis adpressed rusty-pubescent; peduncles of individual cymes short, rusty-pubescent; pedicels slender .2 in. long and short lanceolate bracteoles rusty-pubescent. *Sepals* orbicular, sparsely adpressed rusty-pubescent externally. *Corolla* clouded-white, glabrous within, .4 in. across; lobes rather deeply divided; interlobular spaces closely rusty-pubescent externally; lobules nearly semi-circular, margins erose. *Erycibe* n. 24 Hallier f. Bull. Herb. Boiss. v. 739.

MALAYA: Sumatra; Lampongs, Gunong Trang, by edge of forest, *Forbes* 1454!

4. *ERYCIBE LEUCOXYLOIDES* King MSS. ex Ridl. in Herb. Singap. A very large climber with slender cylindrical branches, bark fissured and covered with a close grey pubescence; branchlets numerous, very slender, rather distinctly angled, grey- or rusty-pubescent; *leaves* subbifarious, ovate or ovate-lanceolate, base rounded, apex subacuminate or abruptly narrowed to an obtuse tip; 1-1.75 in. long, .4-.6 in. wide, membranous or thinly chartaceous, quite glabrous on both surfaces; rather dark-green above, paler beneath; secondary nerves about 3 pairs, very oblique and hardly visible above except in young leaves, not visible beneath even when dry and even when young; petiole .1 in. long, grey-pubescent. *Flowers* axillary, solitary; pedicels .2 in. long, somewhat recurved in fruit, grey-pubescent, bracteolate under the calyx. *Sepals* orbicular, sparsely pubescent on the centre externally, elsewhere glabrous except the ciliate margins. *Corolla* white, sweet-scented, .5 in. across; interlobular spaces brown-tomentose externally; lobules broad semi-orbicular, entire. *Fruit* elliptic, black, smooth, glabrous, .6 in. long, .4 in. wide.

MALAYA: Singapur; climbing in secondary jungle, *Hallier*! *Ridley* 2051! 6897! 10927! Selangor; Kwala Lumpar, *Curtis* 2402!

5. *ERYCIBE SAPOTACEA* Hallier f. & Prain MSS. in Herb. Calcutta. A tree? branches slightly angled, with fissured bark, quite glabrous; *leaves* elliptic, base cuneate, apex abruptly shortly acuminate with tip obtuse; 5 in. long, 2-2.5 in. wide; firmly coriaceous; quite glabrous on both sides, bright-green and glossy above, pale beneath; lateral nerves 6 pairs, distinct above and rather prominent beneath, secondary reticulate venation very distinct on both surfaces; petiole .5 in. long, glabrous. *Flowers* in few-flowered congested, axillary subsessile cymes. *Sepals* and *Corolla* not seen. *Fruit* ovoid, quite glabrous, the epicarp very coriaceous, almost woody, wrinkled and fissured, with a rounded base

and conical pointed apex, 2 in. long, 1 in. in diam.; fruiting pedicels '3 in. long, with epidermis fissured like that of the branches.

PENANG: Government Hill, *Curtis* 772!

A very distinct and striking species, the flowers of which are as yet unknown. In shape the fruit is most like that of *E. Griffithii*, but besides being about twice the size it has none of the scurfy covering of the fruit of that species. The leaves of the two are very different.

6. *ERYCIBE CITRINIFLORA* Griff. Notul. iv. 284. A small tree, 10-20 feet high, with strong straggling shoots; branches terete with numerous lenticels, glabrous, bark not fissured; branchlets terete or faintly angular, finely rusty-puberulous; leaves obovate-lanceolate, narrowed from the middle or beyond to the cuneate base, rounded or gradually narrowed to a shortly acuminate apex with obtuse tip; 5-8 in. long, 2-3.5 in. wide; coriaceous, quite glabrous on both sides; lateral nerves 7-8 pairs, very faintly impressed above, prominently sublaterally raised beneath; secondary reticulate venation visible but not distinct above, hardly discernible beneath; petiole '2 in. long, finely puberulous. Flowers in small 12-20-flowered axillary cymes, '5 in. across, in clusters of 3-5; peduncles '2-'.5 in. long, closely rusty-pubescent; pedicels '1 in. long closely rusty-pubescent as are the lanceolate bracteoles. Sepals orbicular, rusty-pubescent. Corolla creamy yellow within, "smelling exactly like unripe white turnips" (*Proudlock*), '3 in. across, glabrous within; lobes rather wide; interlobular spaces closely yellowish-brown pubescent externally; lobules ovate, slightly crenulate on their outer margins. *E. glomerata* Clarke in Hook. f. Flor. Brit. Ind. iv. 183 in part, not of Bl., nor of Wall.; Prain Journ. As. Soc. Beng. lxiii. 2, 85, not of Clarke, nor of Wall., nor of Kurz. *E. coriacea* Kurz For. Flor. Brit. Burm., ii. 213 in part, not of Wall. *Erycibe* n. 28 Hallier f. Bull. Herb. Boiss. v. 739.

TENASSERIM: Mergui; *Griffith* 5881 K.D! *Proudlock*! *Manson*! Pilai, in the Mergui Archipelago, *J. Anderson*! Tavoy; Laso Rocks, *Shaik Muqim*, 302!

Always growing close to the sea.

7. *ERYCIBE WALLICHII* Prain & Hallier f. Bull. Herb. Boiss. v. 382. A small tree; branches cylindric, much verrucosely lenticelled; branchlets cylindric, dark tawny-pubescent; leaves elliptic or ovate-lanceolate, base cuneate; apex rather gradually narrowed to a shortly acuminate obtuse tip, 4-7 in. long, 1.5-3 in. wide; thinly coriaceous, glabrous above, dark-green, beneath paler and glabrous except the midrib and main-nerves which even in adult leaves are beset with spreading tawny hairs; lateral nerves 9-11 pairs, straight, very slightly

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oblique, raised on under surface, impressed as upper surface; secondary reticulate venation very distinct beneath, obscure above; margin of leaf slightly revolute; petiole tawny-pubescent, .15 in. long. *Flowers* in very densely congested axillary cymes, about .5 in. wide; peduncles very short; petioles and bracteoles tawny-pubescent. *Sepals* orbicular, externally tawny-pubescent. *Corolla* white, .5 in. across; lobes spreading, glabrous within; interlobular spaces externally tawny-pubescent; lobules wide-falcate, margins entire. *Fruit* ellipsoid, black, glabrous, .75 in. long, .4 n. wide. Hallier f. Bull. Herb. Boiss. v. 738. *E. glomerata* Wall. Cat. 1338; Kurz. For. Flor. Brit. Burm. ii. 213; Clarke in Hook. f. Flor. Brit. Ind. iv. 183 (syn. *E. citriniflora* Griff. excluded), not of Bl.

BURMA: Rangoon, Cleghorn 188! Amherst, Falconer 516! Mergui; Griffith CULT. in Hort. Bot. Calcutta, "26/9/58."

The two species *Erycibe Wallichii* and *E. citriniflora* are confused under the name *E. glomerata* in the *Flora of British India*; it is therefore advisable to give here fuller description of both. They were not confounded by Mr. Kurz in the *Forest Flora of British Burma*; Kurz accepted the one with leaves glabrous beneath as *E. coriacea*, to which it is indeed very closely related though it is nevertheless quite a distinct species; the other, which is Wallich's *E. glomerata*, he treated as true *E. glomerata*.

The writer in *Journ. As. Soc. Beng.* lxiii. 2, 85 (1894) could not, on account of its leaves with nerves pubescent beneath, accept Wallich's *E. glomerata* as the same thing as Blume's. Unfortunately he tentatively adopted that with glabrous leaves as being possibly Blume's tree, with the result that he provided for the true *E. glomerata*, which is common in the Malay Peninsula, a new name *E. albida*. This mistake Dr. Hallier has pointed out (Bull. Herb. Boiss. v. 739) and the rectification of this mistake rendered it necessary for Hallier and the writer to provide a name for Wallich's erroneous *E. glomerata*. The adoption of the name *E. citriniflora* for the tree that is associated with *E. glomerata* in the *Flora of British India*, but that is different from Wallich's plant, is made in spite of Griffith describing the leaves of his tree as "subglabrous" only. We have, at Calcutta, examples of both the species collected by Griffith at Mergui, and his description of the distinctive odour of the flowers tallies so well with that of Proudlock that there can be no doubt as to the tree he intended as *E. citriniflora*.

8. *ERYCIBE MAGNIFICA* Prain. A strong creeper 80–100 ft. long, stem 2-3 in. in diam.; old branches .75 in. in diam., still densely tomentose, quite cylindric, with large pith, branchlets .3 in. in diam., densely velvety with a tawny to rusty matted tomentum; leaves elliptic or elliptic-obovate, with a narrowly truncate or rounded base, and an obtuse or sometimes retuse apex, the margin strongly revolute; 8–10 in. long, 3.5–4 in. wide; coriaceous; upper surface quite glabrous, dark-green and shining, with sometimes a silvery sometimes a rich coppery sheen; under surface velvety, pale brownish-green, the tomentum longer, looser, and sometimes whitish on the main-nerves; lateral nerves rather

straight, spreading, 12-15 pairs, rather distinctly looped along the margin, prominent beneath, deeply impressed above as is the secondary reticulate venation; petiole .35 in. long, densely rusty-velvety. *Flowers* in short axillary racemes, sometimes clustered, of close-set 2-3-flowered individual cymules; the racemes 1-2 in. long; peduncles, short pedicels and small ovate bracts and bracteoles densely rusty-velvety. *Sepals* orbicular, densely velvety outside, quite glabrous within, coriaceous, in fruit .2 in. across. *Corolla* .5 in. across; lobes slightly spreading, glabrous within and waxy-white or yellow, narrow and deeply divided; interlobular spaces densely dark-brown, almost black-velvety pubescent externally; lobules very small oblong. *Fruit* ellipsoid, 1.25 in. long, 1 in. in diam., densely softly velvety, of a rich brown colour.

PERAK: Larut, *Kunstler* 3454! 3879! 6721!

In the first of his three gatherings *Kunstler* has noted this as a tree 50-70 feet high, but in the two subsequent ones as a large creeper, which is, from the appearance of the specimens, undoubtedly the case with the first gathering also.

LETTISOMIA Roxb.

LETTISOMIA SPHAEROCEPHALA Prain. A shrubby climber; branches irregularly angled with ridged bark, brownish on young shoots, pale-straw coloured on older twigs, sparingly beset with adpressed acicular hairs; leaves ovate-lanceolate, acute, base rounded, purplish beneath; very sparingly beset on both surfaces with adpressed hairs; length 4-5 in., width 1.5-2 in.; petiole 1-1.25 in., sparsely pubescent above with adpressed hairs. *Flowers* in compact capitate globose cymes, 1.5-2 in. across, on long slender peduncles, 2-12 in. long, sparingly adpressed pubescent; surrounded by large orbicular purple involucrent sessile bracts, 1.5 in. across, sparsely hirsute externally, quite glabrous internally, the individual flowers enveloped in similar but smaller, sub-orbicular to spatulate bracteoles .5 in. long, .25-.5 in. wide; pedicels short, adpressed-setose. *Sepals* glabrous externally except at their setose apices, the outer subacute, the inner wider obtuse, .25 in. long. *Corolla* .75-1 in. long, infundibuliform-campanulate, pink, softly adpressed-hirsute externally. *Berry* not seen. *Argyrea sphaerocephala* Prain MSS.

PERAK: Krian, Abu Salama, Gunong Harang Ryah, *Scortechini*!

A very striking and remarkable species. The corollas do not appear to be full-sized. *Scortechini*, on the ticket of his Gunong Harang Ryah specimens, has written "fruit from Maxwell's Hill" but unfortunately the fruiting specimens alluded to are not at Calcutta.

LABIATAE.

NOSEMA Prain.

Calyx per anthesin ovatus, fructifer tubulosus hand fenestratus, 2-labiatus, labiis postico oblongo integro persistente, antico rotundato integro subdeciduo. *Corollae* tubus cylindricus fauce parum ampliatus; limbus 2-labiatus, labio postico breviter 3-lobato lobo medio parum latiore emarginato, antico paullo brevior oblongo integro concavo. *Stamina* 4 declinata, filamentis liberis, posticis basi dente auctis: antherae confluentia 1-loculares explanatae. *Discus* antice vix tumens. *Stylus* apice breviter bifidus lobo antico longiore. *Nuculae* ovoideae, laeves. —Herbae erectae. Verticillastri in capitula terminalia globosa vel dense cylindracea conferta. Flores parvuli. Species 3-4, Monsunenses.

The genus now described is most nearly allied to the genus *Mesona* Bl., the two agreeing in the spurred character of the posterior filaments. To the courtesy and kindness of Mr. C. B. Clarke, F.R.S., to whom he had submitted for an expression of opinion the proposed new genus, the writer is indebted for the subjoined concise and effective diagnosis.

I. *MESONA* Blume.—*Calyx* with 2 membranous coloured lips, the upper 3-fid, the lower entire. *Inflorescence* interrupted; fruiting calyces fenestrate with transverse bars, held up on pedicels.

II. *NOSEMA* Prain.—*Calyx* with 2 membranous coloured lips, both undivided. *Inflorescence* dense; fruiting calyces not transversely barred, subsessile, the pedicels finally buried in the agglomerated calyces.

1. *NOSEMA CAPITATUM* Prain. A branching herb over 15 in. in height; stems 4-grooved, with rounded angles, beset with adpressed reflexed hairs. *Leaves* opposite, narrowly oblong, tapering from below the middle to the cuneate base with entire margin, margin elsewhere finely crenate, apex obtuse or subacute; chartaceous, pubescent on both surfaces, but especially on the nerves beneath; lateral nerves 9-10 pairs, oblique, straight, rather close-set, conspicuous; length 2.2.5 in., width .6.75 in.; petiole pubescent .25 in. long. *Flowers* in dense terminal capitula .25-2 in. long; *calyx* in fruit .15 in. long, upper lip half as long as tube, lower lip less than half as long as upper and soon deciduous; tube not fenestrately transversely barred, densely tawny-tomentose with spreading hairs; *corolla* half as long again as calyx, both lips sparsely pubescent externally; *stamens* exerted, declinate, the posterior pair inserted higher up than the anterior and strongly toothed just above their bases. *Nutlets* all ripening, ovoid, glabrous, smooth.

INDO-CHINA: Siam; Kanboerie, *Teysmann!*

In Herb. Kew. there are two gatherings from Java, by Junghuhn (nn. 8, 51), of which the writer has seen ripe fruits. As to calyx and nutlets they agree exactly

with the Siam plant, and may prove only a variety. But the inflorescence of the Java plant is narrower, denser, and more hairy than that of the Siam plant. This Java plant is written up in Herb. Kew. as *Mesona* sp. nov. Bentham MSS. [1879] and for the moment may bear the name *Nosema capitatum* VAR.? *javanica*, C.B. Clarke MSS.

There are two other distinct species of *Nosema* in Herb. Kew.

2. NOSEMA PRUNELLOIDES *C. B. Clarke*; leaves ovate-oblong, 1-1.25 in. long; lateral nerves mostly 7 pairs. *Mesona prunelloides* Hemsl. in Forbes & Hemsl. Journ. Linn. Soc. xxvi. 267.

CHINA: Pakhoi, *Playfair* 110.

3. NOSEMA TONKINENSE, *C. B. Clarke* MSS.; leaves narrow-oblong, up to 1.5 in. long, .25 in. wide; lateral nerves about 5 pairs. *Mesona chinensis* Herb. Kew. partim, non. Benth.

INDO-CHINA: Tonking; *Balansa*, 993.

Noviciæ Indicæ XXI. *An undescribed Indian Musa.*—By D. PRAIN.

[Read 2nd December, 1903.]

Three years ago a native collector in the service of the Royal Botanic Garden, Shibpur, sent to Calcutta the rootstocks of a *Musa* from the Jaboca Naga country. The plant has thriven well and has recently flowered. As the species is very different from any *Musa* hitherto in cultivation in the Royal Botanic Garden, is unrepresented in the herbarium collections either at Kew or at Calcutta, and is undescribed in Mr. Baker's *Synopsis of the Genera and Species of Musæ* or in Professor Schumann's article *Musacæ* in Engler's *Pflanzenreich*, a formal description of the plant is herewith offered to the Society.

MUSA (§ Eumusa) NAGENSIIUM *Prain* sp. nov. Herba stolouifera, rhizomate perenni caule sub-cylindrico ultra 6-metrali, innovationibus glaucissimis. *Folia* petiolata laminis longitudine ultra 3-metralibus, sursum viridibus nitidis, subtus densissime glaucis. *Inflorescentia* terminalis, nutans; rachi ultra 2-metrali, glabra; bracteis oblongo-lanceolatis, inferioribus 20-24 cm. longis, 10 cm. latis, summis 15-18 cm. longis, 7 cm. latis, externe lateritio-miniatis, intus nitidis aurantiacis, singulis flores 18-20 2-seriatis includentibus. *Flores* inferiores per-